A SURVEY OF CERTAIN PRE-SCHOOL EXPERIENCES AND THEIR APPARENT RELATION TO PROGRESS IN BEGINNING READING

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by

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CHAPTER I

INTRODUCTION

We live in a world in which reading is a part of almost everything we do. It is important that a child achieve reading skills that will help him to (1) earn a livelihood, (2) enrich his own life and that of others, (3) aid in proper use of leisure time, and (4) help guide him in both personal living and intelligent citizenship.

Experience is vital. A child understands only in terms of concepts he has attained through experience. Many authorities consider that it is possible for the child's experiential home background to be too meager to enable him to understand the materials he is expected to learn to read in school.

I. THE PROBLEM

Statement of the problem. The purpose of this study was to determine the effects of certain pre-school experiences upon children's progress in beginning reading.

Importance of the problem. In the complex civilization in which we live, reading is vital, and the child who fails to develop essential reading skills is handicapped in proportion to the degree of this failure.

A child must have a rich background of experience if he is to interpret successfully the meaning of the printed page; otherwise, it will have no more meaning for him than some highly technical material would have for the average person.[1]

Teachers have long been aware of the failure of our schools to teach all children to read, and the public has become increasingly concerned. It was the purpose of this study to show the importance of pre-school factors which may determine the degree of success a child can achieve in learning to read.

Delimitation of the study. This study was limited to a consideration of the pre-school experiences of those children who entered the Boone Elementary School for the first time in September, 1955, in relation to their progress in beginning reading.

II. DEFINITIONS OF TERMS USED

Meaningful experience. This term was used to indicate those experiences which a child has had that would (1) help him to understand the materials he is expected to

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[1] Lillian Lamoreaux and Dorris Lee, Learning to Read Through Experience (New York: Appleton-Century-Crofts, Inc., 1943), p. 5.

learn to read and (2) enable him to be a well-adjusted participant in all the activities of the schoolroom.

Pre-school experience. This term refers to those experiences the child had before he entered the first grade.

Reading readiness. This term was used to mean that stage in a child's development at which he can learn to read easily and efficiently without undue emotional strain.

Concept. This term was used to mean ". . . a mental image or abstraction formed by generalization from many experiences with particulars."[2]

III. ORGANIZATION OF REMAINDER OF THE THESIS

The remaining chapters of the thesis were organized in the following manner:

Chapter II. A Review of Related Literature

Chapter III. The Procedure of Investigation

Chapter IV. Analysis of Findings

Chapter V. Summary, Conclusions, and Recommendations

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[2] William C. Morse and G. Max Wingo, Psychology and Teaching (New York: Scott, Foresman and Company, 1955), p. 249.

CHAPTER II

REVIEW OF RELATED LITERATURE

Literature dealing with reading readiness indicates that some children reach first grade ready to read and seemingly do not need a period of preparation. These children have reached the stage of "reading readiness," a term which was mentioned as long ago as 1840. In that year Jonah Bumstead wrote a book called: My Little Primer Going Before My First Book to Get Me Ready For It.[1] In general usage, however, the concept of "reading readiness" is relatively new.

William S. Gray has this to say concerning a child's readiness to read.

> There is no substitute for firsthand experience in developing readiness for reading. Only as a child has vivid concepts and wide experience can he secure rich meaning from the printed page.[2]

Readiness is a developmental condition which is affected by many factors in various combinations. The

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[1] Faye Adams, Lillian Gray, and Dora Reese, Teaching Children to Read (New York: The Ronald Press Company, 1949), p. 41.

[2] William S. Gray, "Reading in Relation to Experience and Language," Supplementary Educational Monographs, published in conjunction with The School Review and The Elementary School Journal, Vol. 6, 57:33 (Chicago: The University of Chicago Press, 1944).

child's reading success is dependent upon his mental, emotional, physical, and social readiness, and on a rich background of experience and ability in language expression.[3]

Among school beginners there is a six-year range of reading maturity levels, and this range grows wider as children grow older.[4]

I. THE EFFECT OF MENTAL AGE

A study made by Morphett and Washburne of the reading achievement of 141 Winnetka, Illinois, first grade children showed that there is a fairly high degree of relationship between mental age and reading progress. The correlation ranged from .50 to .65. There was a higher degree of correlation between mental age and reading progress than there was between intelligence quotient and reading progress. A repetition of this experiment was made at a later date with different teachers and different children, confirming all the basic conclusions of the earlier study.[5]

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[3] Adams, et. al., op. cit., p. 109.

[4] Emmett Albert Betts, "First Graders Vary Six Years in Reading Ability," Science News Letter, 65:152, March 6, 1955.

[5] Mabel Vogel Morphett and Carleton Washburne, "When Should Children Begin to Read?" The Elementary School Journal, 31:496-503, March, 1931.

Gates, reporting on a study of four groups of children in different school systems, says:

> Statements concerning the necessary mental age at which a pupil can be instructed to learn to read are essentially meaningless. The age for learning to read under one program or with the method employed by one teacher may be entirely different from that required under other circumstances. . . .[6]

Dean found that mental age was superior to score on reading readiness tests in predicting reading achievement.[7]

"Requisite capacity" and "background of experience" are so closely associated that the question arises as to whether or not they may be disentangled. Bond and Wagner have associated them thus:

> . . . some children in poor environment tap most of the resources and thereby gain a fairly large background of understanding, even though that background be somewhat narrow in scope. Other children, in environments of many opportunities, have meager and limited backgrounds of understanding, for they may not have had the capacity to avail themselves fully of their opportunities. Obviously, the children in the favorable environments stand greater chances of developing broad and meaningful backgrounds. Thus, children of six years of age vary greatly in the extensiveness and usefulness of the backgrounds they possess.[8]

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[6]Arthur I. Gates, "The Necessary Mental Age for Beginning Reading," The Elementary School Journal, 37: 497-508, March, 1937.

[7]Charles D. Dean, "Predicting First-Grade Reading Achievement," The Elementary School Journal, 39:609-616, April, 1939.

[8]Guy L. Bond and Eva Bond Wagner, Teaching the Child to Read (New York: The Macmillan Co., 1950), p. 122.

Clark gave further emphasis to the correlation of reading ability with mental age. He charted the scores on the reading section of the California Achievement Test, made by pupils with different I. Q.'s, at each grade level from one to fourteen.[9]

Studies made by Shores and Saupe showed that reading ability and mental age are positively correlated.[10]

The evidence concerning relationship between mental age and progress in beginning reading seems, in some cases, contradictory. It is therefore worthwhile to consider the contribution of pre-school experience as a basic factor in success in beginning reading.

II. THE EFFECT OF PHYSICAL FACTORS

Visual defects. The relationship between visual characteristics and reading efficiency has been studied widely. Gray has this to say:

> . . . Many pupils read well in spite of visual defects and they might read better or with less discomfort if such defects were corrected or eliminated.

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[9] Willis W. Clark, "Evaluating School Achievement in Basic Skills in Relation to Mental Ability," Journal of Educational Research, 46:179-191, November, 1952.

[10] J. Harlan Shores and J. L. Saupe, "Reading for Problem-Solving in Science," Journal of Educational Psychology, 44:149-58, March, 1953.

> In any event, the fact is now widely accepted that visual examinations are essential as a part of an individual diagnosis.[11]

A recent study was made by Edson, Bone, and Cook, using 188 fourth-grade pupils, to determine the limitations of vision upon silent reading abilities. The findings indicate that, within these groups studied and for the tests employed, no evidence was found to support the opinion that achievement in reading is limited to those pupils with unimpaired vision. Nevertheless, according to the investigators, every effort should be made to insure visual comfort through adequate attention to visual defects by qualified persons.[12]

Knox found that the number of different symptoms of visual defects among pupils was not a good criterion for referral to a refractionist. Her study also indicated that often other factors, such as emotional maladjustment, are more significant in causing reading difficulty than visual defects noted.

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[11]William S. Gray, et al., "Reading," Review of Educational Research, 7:493-507, December, 1937.

[12]William H. Edson, et al., "Relationships Between Visual Characteristics and Specific Silent Reading Abilities," Journal of Educational Research, 46:451-57, February, 1953.

[13]Gertrude E. Knox, "Classroom Symptoms of Visual Efficiency," Clinical Studies in Reading II, Supplementary Educational Monographs No. 77:97-101 (Chicago: University of Chicago Press, 1953).

Auditory ability. Reynolds failed to secure evidence that auditory ability, as measured by a series of carefully selected tests, was related to general reading ability. He did find that scores on tests of auditory memory span, word discrimination ability, and pitch discriminatory ability may be used to advantage in predicting word recognition ability and capacity to learn the sound values for common word elements.[14]

Poling compared the scores of good and poor readers on various auditory tests and secured somewhat different results. She found significant differences in their auditory memory span, but not in auditory acuity or discrimination.[15]

Muscular co-ordination. If a child is to do his best, there must be sufficient kinesthetic co-ordination to carry out the necessary activities in learning to read. It is essential that he have ability to articulate eye, ear, hand, and voice reactions. The child needs a number of manipulative

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[14] Maynard Clinton Reynolds, "A Study of the Relationships between Auditory Characteristics and Specific Silent Reading Abilities," Journal of Educational Research, 46: 439-49, February, 1953.

[15] Dorothy L. Poling, "Auditory Deficiencies of Poor Readers," Clinical Studies in Reading II, 77:107-111 (Chicago: University of Chicago Press, 1953).

skills such as those required to use paper and pencil, chalk and chalkboard, paint and easel, crayon, ruler, scissors, blocks, and toys.[16]

General health. Concerning the matter of general health, Robinson says:

> . . . There appear to be two ways in which reading may be affected by physical difficulties. First, children seem to fatigue quickly and become irritable and inattentive when their energy is at a low point. This may also render them more susceptible to diseases, which is the second means of affecting reading, namely, by keeping the child away from school.[17]

III. THE EFFECT OF SOCIAL AND EMOTIONAL PROBLEMS

"Failure in reading has frequently been attributed to emotional problems, and emotional problems have likewise been said to be created by reading failure."[18]

According to Robinson, the poor reader is usually a child who has some personal problems which the home, school, and community are failing to meet.[19]

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[16]Hugh B. Wood (ed.), "Readiness: A Basic Principle in Beginning Reading," Curriculum Bulletin No. 147:17, (Eugene, Oregon: University of Oregon, 1955).

[17]Helen M. Robinson, Why Pupils Fail in Reading (Chicago: The University of Chicago Press, 1946), p. 61.

[18]Ibid., p. 77.

[19]Helen M. Robinson, "The Poor Reader, Why?" Library Journal, 78:875-877, May 15, 1953.

In a study of forty-five children, who were tested in both the first and fourth grades, Solomon emphasized that many aspects of personality exert an influence on reading achievement. An analysis of these records, together with those relating to progress in reading, indicated that the successful readers tend to emphasize the abstract or theoretical in their approach to problems, while the less successful give more attention to unimportant details. The more successful group also exhibited greater accuracy of perception of their environment and ". . . show greater feelings of anxiety and inadequacy." According to this study, successful girls, as a rule, are ". . . a well-adjusted group emotionally and intellectually." Lack of success in reading was accompanied by such changes in personality pattern as ". . . a marked increase in the quantity of affective energy and capacity for environmental contact . . ." and an increase in ". . . immature, impulsive, emotional reactions."[20]

A study made by Leichty also points to the importance of the personality of the individual. In using the Rorschach test on nine and ten-year old children, she found that eighty-

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[20]Ruth H. Solomon, "Personality Adjustment to Reading Success and Failure," Clinical Studies in Reading II, Supplementary Educational Monographs No. 77:64-82 (Chicago: University of Chicago Press, 1953).

nine per cent of those needing remedial reading instruction looked at the white space background instead of the black ink spots. This tendency to pay attention to the white background instead of the black shape is generally considered a sign of "negativism," or unconscious resistance toward fitting into the required pattern of behavior.[21]

First grade children differ greatly in emotional and social adjustment. Some are happy, pleasingly confident, eager to learn, willing to share with others, and to take part freely in the activities of the schoolroom. Others are timid, unhappy, lack interest, show fears, and do not care to play or work with others. Still others seem uncooperative, bold and forward, showing signs of belligerence when they cannot have their own way.[22]

The emotional reactions of the child are closely associated with the training his home has offered. If he has been too sheltered and unaccustomed to responsibility, he may not be ready for the activities of the schoolroom. If he is too timid to speak, or to attempt group activities, he will be unable to make the progress necessary for success in reading. The question arises as to whether or not a

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[21]Mary M. Leichty, "Difficulty in Reading May Be Due to Individualism," Science News Letter, 65:292, May 8, 1954.

[22]Wood (ed.), loc. cit.

rich background of experiences would reduce a child's tendency to be timid.

IV. THE EFFECT OF ENVIRONMENT AND EXPERIENCE

Home and community. The home is an important factor in determining the child's interests and his attitudes toward school and the things he will be expected to do there. Gates says that "Reading is more than an all-school problem. It is a home and community problem."[23]

A child's ability to read does not develop suddenly when he becomes old enough to enter school. The roots of reading ability lie as far back as when the child is able to point out pictures in a picture book. From this time on, reading ability develops by slow stages as the child learns to name objects printed in a book, recognizes isolated letters and words in a familiar book, becomes able to read sentences, and finally develops the ability to recognize unfamiliar words accurately and rapidly.[24]

Mackintosh places much emphasis on the responsibility

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[23]Arthur I. Gates, "Reading in the Elementary Schools," The Forty-Eighth Yearbook of the National Society for the Study of Education II (Chicago: The University of Chicago Press, 1949), p. 8.

[24]Frances L. Ilg and Louise Bates Ames, "Developmental Trends in Reading Behavior," The Journal of Genetic Psychology, 76:291-312, June, 1950.

of the home.

> Whether or not a child learns to read easily and happily depends not only upon the teacher but upon the attitude of the parents toward the child and toward reading. What happens to a child in his preschool years makes a difference in his feelings about reading. Where the child feels secure in being loved by his parents and by other members of the family, and where he has children of his own age to play with who are also interested in books and stories, he is more likely to be socially and emotionally ready for the new experience of school when it comes, and for learning to read.
>
> If the child has picture books of his own, if his parents read to him, talk to him, play with him, if they tell him stories that he can understand, he will look forward to reading as something exciting.
>
> But if, on the other hand, he has no books except the comics or coloring books; if there are few, if any, books and magazines in his home that his parents use themselves; and if he hears no stories that are just for him, reading may be an unhappy experience that is bewildering, especially when his parents assume that he will be able to read in a book within the first few months of school.[25]

Hildreth says that children who have spent the first six years of their lives in substandard homes, or have lived under abnormal conditions, frequently come to school with negative attitudes toward schooling or with false conceptions of school life. She further states that some parents have little sense of obligation in instructing their young children in self-responsibility or in teaching them emotional

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[25] Helen K. Mackintosh, "How Children Learn to Read," Bulletin No. 7, Federal Security Agency, Office of Education (Washington, D. C.: U. S. Printing Office, 1952), pp. 1-16.

control and other desirable forms of behavior.[26]

Language development. The child must develop oral language facility if he is to be successful in learning to read. If he does not feel secure in this regard he will fail to express himself.

Zirbes places emphasis upon oral language in this manner:

> The child who does not have a rich stock of meanings, gathered in the process of firsthand experience in a suitable environment must deal with the concrete things and the actual relationships between them, in ways which make oral language function, before he can be expected to get meaning from the printed page or to care enough to put forth the directed effort upon which learning to read depends.[27]

Lepley and Kobrick secured evidence that the number of synonyms attached to a concept by an individual varied with the frequency with which he used the concept. Their findings emphasize the importance of usage, or "personal values," in word recognition.[28]

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[26]Gertrude Hildreth, Readiness for School Beginners (New York: World Book Company, 1950), p. 14.

[27]Laura Zirbes, "Characteristics, Interests, and Needs of Pupils That Aid in Defining the Nature and Scope of the Reading Program," Adjusting Reading Programs to Individuals, compiled by William S. Gray, Supplementary Educational Monographs Published in Conjunction with The School Review and The Elementary School Journal (Chicago: The University of Chicago Press, October, 1941), p. 43.

[28]William M. Lepley and John L. Kobrick, "Word Usage

Language development is a vital factor because reading is based upon interpretation of abstract language symbols. "Hence pupils who have had meager experiences and limited language backgrounds are handicapped in getting meaning from print."[29]

Training outside the home. A study by Risser and Elder, in which no consideration was given to any factor other than kindergarten experience, indicated superior ability in reading for the group who had been given this opportunity.[30]

Lee and others found that, on the Lee-Clark Reading Readiness Test, the score of a child with kindergarten experience predicts more accurately the ability to learn to read than does the score of a child who has not had such experience.[31] The question arises concerning the preceding study as to whether or not the Lee-Clark Reading Readiness

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and Synonym Representation in English Language," Supplement to the Journal of Abnormal and Social Psychology, 47:572-73, April, 1952.

[29]Robinson, "The Poor Reader, Why?" loc. cit.

[30]Faye Risser and Harry E. Elder, "The Relation Between Kindergarten Training and Success in the Elementary Schools," Elementary School Journal, 28:286-89, December, 1927.

[31]J. Lee, et. al., "Measuring Reading Readiness," Elementary School Journal, 34:656-66, May, 1934.

Test is a reliable instrument of measure for a group of first-grade children who have wide variation in their backgrounds of experience.

There is wide variation in the programs offered by kindergarten, Sunday Schools, Vacation Church Schools, and pre-school training programs. Any of these experiences, however, should help a child to become more self-reliant and better adjusted socially. In each of these situations attention is consciously directed toward the child, and this association with books, stories, and other sharing activities should develop positive attitudes toward the activities in which he would engage when he becomes a member of a first grade group.

Hildreth says, "Children who have been to kindergarten benefit from the many-sided experiences the modern kindergarten class provides."[32]

It seems reasonable to assume that those children who have had the advantage of nursery school and/or kindergarten experiences have had better opportunities to develop independence and social adjustment than have those who have always stayed in the protecting shelter of the home.

According to Monroe:

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[32]Hildreth, op. cit., p. 16.

> American babies are born into an environment that fosters reading, and they should grow into reading as naturally as they grow into language. When they are old enough to go to school and sit in groups around a teacher, the systematic instruction in reading which the teacher gives is based largely upon the concepts, understandings, and attitudes toward reading which have been developed during preschool experiences with books.[33]

Experience with reading materials. There seems to be only a few available studies dealing with the relationship of the child's preschool experiences with reading materials to success in beginning reading.

Almy says, "A significant, positive relationship exists between success in beginning reading and the child's responses to opportunities for reading prior to first grade."[34] The preceding statement was made following a study dealing with the pre-school experiences of 106 Elmont, Long Island, first-grade children.

There is wide variation in the direct interest pre-school children show concerning reading. Many children busy themselves about "reading" to the extent of enjoying stories that are read to them, looking at picture books, and

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[33]Marion Monroe, Growing Into Reading (New York: Scott, Foresman and Company, 1951), p. 4.

[34]Millie Corinne Almy, Children's Experience Prior to First Grade and Success in Beginning Reading (New York: Bureau of Publications, Teachers College, Columbia University, 1949), p. 111.

demanding adult attention to their questions about signs and notices. Other children are eager to form letters, while some prefer to use crayons, paints, and pencils to express themselves. Still others want to make abstract symbols or point to certain words or phrases when they are looking at a book.[35]

Experience and concepts. Hillard and Troxell, in reporting a study of Informational Background As A Factor in Reading Readiness and Reading Progress, have this to say:

> Other factors being equal, this study shows that children with rich backgrounds are more strongly equipped to attack the printed page than are pupils of meager backgrounds because of enriched meanings and thought which the former bring to this task. Research has discovered that one of the greatest difficulties encountered in learning to read is lack of understanding of words and ideas. Meanings grow through experience and contacts.[36]

Woody feels that poor reading achievement of pupils, other than those who should be regarded as clinical cases, is conditioned by the pupil's lack of experience connected with the things about which he is reading or by his failure

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[35]Roma Gans, "The Road to Reading," Child Study, 31:8-11, Winter, 1953-54.

[36]George H. Hilliard and Eleanor Troxell, "Informational Background as a Factor in Reading Readiness and Reading Progress," The Elementary School Journal, 38:255-63, December, 1937.

to connect whatever experience he may have had with the material which he is attempting to read. "In either case the result is the same: meaningless word calling on the nonsense level."[37] Symbols to which the child is asked to respond are merely signposts for experience. The meaning and experience for which the symbol stands are more important than the symbol itself. "A large portion of the task in the teaching of reading is to see that these symbols take on meaning and really become signposts for experience."[38]

In order to help understand the problem of a meaningful vocabulary, Gammon carried out a study of the extent and nature of the problems faced in teaching words of multiple meanings, using first, second, and third grade readers. An analysis of the pupil response showed that one-fourth of the answers of first grade pupils, almost one-third of the answers of second grade pupils, and over one-fourth of the third grade answers were incorrect. At each grade level there was a group of children, presumably having a richer background of experience, who made few, if any, incorrect responses. "Below this group, the drop in errors was rapid."

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[37] Clifford Woody, "Attempts at Measurement of Meaningful Experience as a Factor Conditioning Achievement in Reading," Peabody Journal of Education, 16:118-191, November, 1938.

[38] Ibid.

The errors were on a few words rather than ". . . a smattering of errors for each word."[39]

In a study dealing with the nature of the meaning attached to words, Werner and Kaplon developed a "word context" test. It was given to 125 children whose I. Q.'s ranged from 101 to 111, and who were distributed equally among five age groups from 8.6 to 13.5 years. The following conclusions were reached: (1) growth in word meaning increases steadily from grade to grade; (2) "complete incorrect solutions" decrease rapidly from the first to the second group and remain more or less constant thereafter; (3) at immature levels, a word does not possess stability, but may have ". . . a wide and often diffuse contextual connotation . . .," may be ". . . used with other concepts . . .," and its meaning may be readily altered.[40]

Children enter school with almost unbelievable differences in background experiences and with corresponding differences in concepts and vocabulary. Some children live in environments that are unfavorable to reading. These children seldom, if ever, have opportunity to see books or

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[39] William S. Gray, "Summary of Reading Investigations; July 1, 1952 to June 30, 1953," Journal of Educational Research, 47:413, February, 1954.

[40] Ibid., p. 407.

magazines, nor are they taken on trips to the country, to the city, to the seashore, to the mountains, or to other distant points of interest.

Some home environments are unfavorable toward giving children wide experience because the parents are too busy to spend time with them. On the other hand, there are homes where the parents make a very definite effort to provide a favorable reading climate for their children by showing an interest in reading themselves and by taking time to enjoy stories with their children.[41]

Porter has this to say concerning what a parent can do to help his child achieve reading readiness:

> Parents are urged to help. They are advised: Take him on a picnic--the storybook kids are always having picnics. Take him to a farm, a zoo, the grocery store, the post office, the firehouse. Teach him "stop" and "go" signals and his own address. Read him stories, teach him rhymes, and above all, answer his questions.[42]

V. SUMMARY

Most authorities agree that in order to be successful as a student, it is imperative that a child learn to read effectively. Gates has said, "Failure in reading is as

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[41] Wood (ed.), loc. cit.

[42] Amy Porter, "Why Can't They Read?" Colliers, 118: 22-23, 60, November 30, 1946.

serious in its consequences to children as financial or marital failure is to adults."[43]

In considering all the possible factors that might be determining influences in the child's beginning success or failure in reading, the following statement by Monroe seems to be a fitting summary.

> It is probable that the reading defect is caused by a constellation of factors rather than by one isolated factor. Two children may therefore possess much the same impeding constitutional factor and yet one, through good environmental, methodological, and emotional factors, may overcome the disability, while the other, through poor environmental, methodological, and emotional factors, may become seriously retarded. The reading defect may result in those cases in which the number or strength of the impeding factors is greater than the number or strength of the facilitating factors.[44]

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[43] Arthur I. Gates, "The Role of Personality Maladjustment in Reading Disability," Pedagogical Seminary and Journal of Genetic Psychology, 5:82, September, 1941.

[44] Marion Monroe, Children Who Cannot Read (Chicago: The University of Chicago Press, 1932), p. 110.

CHAPTER III

THE PROCEDURE OF INVESTIGATION

Method. It seemed that the best method of obtaining information concerning pre-school experiences would be that of interviewing the parents of all the children entering the first grade, using a check-list of pertinent questions as a guide.[1] The investigator realized that the success of such a method would depend to a considerable extent upon the rapport established between the interviewer and the person interviewed. The investigator stressed the fact that the parent, in responding to the questions asked, was contributing to the progress of his child, since the data collected during the interview were to be made available to the first grade teachers.

After information concerning the pre-school experiences of the beginning first-graders in the Boone Elementary School had been collected, the investigator divided the children into three groups on the basis of rich, average, and meager backgrounds of experience as indicated by the information obtained from the parents. This was done in order to select two contrasting groups to be used for

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[1] Infra, Appendix A, p. 85.

comparative purposes. Twenty children were selected for the "rich background experience" group, and twenty were selected for the "meager background experience" group, leaving thirty-two children in a middle group that was not included in the remainder of the study.

Children included in the study. The first-grade children of the Boone Elementary School were chosen for this study because of (1) its accessibility and (2) its connection with the Appalachian State Teachers College. There are three first grade sections with three separate teachers. Only those children who were entering school for the first time were included in the study.

The school district is composed of outlying areas surrounding the town of Boone, which has a population of approximately three thousand persons, is a county seat, a college town, and is the trade center for a large mountainous, agricultural area.

There is wide variation in the home background of the children in the school district in question; they range from those who seem to have had many advantages to those whose background of experience has been very limited. The children are assigned to the three first grade teachers on a planned heterogeneous basis; each classroom group consists of children coming from both rural areas and the town areas, as well

as from homes of widely differing socio-economic levels. In this respect, it would be reasonable to assume that the children comprising the three separate first grade groups would be fairly evenly distributed from the standpoint of pre-school experiences.

The interview. Before visiting in a home for the purpose of carrying out an interview, the investigator made contact with the parent either by telephone or by letter.[2] As a definite time had been scheduled for each interview, the parent was visited at a time when he was free to talk. These interviews were held during the week preceding the opening of school and during the first two weeks of the regular session.

There were several reasons for holding the interviews at the beginning of the school year. Parents of children entering the first grade tend to be very interested in helping their children become adjusted to the routine of school life. It seemed reasonable to assume that the parents would be most likely to recall the experience in which the interviewer was interested if they were questioned before the child had experienced the fast development that comes during the first year of school. It was assumed also that the

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[2] Infra, Appendix B, p. 86.

material gathered from the parents would be of benefit to the teachers of these children. The investigator felt that she would be able to watch and study the progress of these children more effectively if she had become acquainted with them early in the school year.

Nearly all of the parents seemed happy to cooperate, and good rapport was apparently established in each of the seventy-two interviews that were made. (One parent refused to participate in the study.)

After the investigator had established rapport with the parent, she conducted the interview using a check-list as a guide. Some information was secured by means of direct questions, while other information was secured indirectly. In a few instances, a question was asked in several different ways before the interview was over in order to secure a valid picture. All of the interviews were made by this investigator. The answers to the questions were recorded as they were given; often the exact words of the parent were used. Additional impressions were recorded soon after the interview.

The testing program. After the children had attended school for five months, the investigator used the following types of tests with the forty children included in the final study:

1. Intelligence test (i.e., The Detroit Beginning First-Grade Intelligence Test)
2. Tests to measure such physical factors as vision, hearing, muscular coordination, height, weight, and general health
3. Check-list for the evaluation of social and emotional adjustment
4. Reading achievement test (i.e., Gates Primary Reading Tests on word recognition and sentence reading)

Summary. After administering the tests, the investigator compiled, classified, and analyzed the results in relation to data obtained from the parents concerning the children's pre-school experiences. These data were secured through personal interviews made by the investigator. Two contrasting groups of twenty pupils each were selected on the basis of either rich or meager background or experience. Certain conclusions were drawn, and recommendations, based on the findings of this study, were made by the investigator.

CHAPTER IV

ANALYSIS OF FINDINGS

It is the purpose of this chapter to present the findings of this study in two divisions: (1) the results of the interviews, and (2) the testing program. In each division the meager background experience group (Group II) will be compared with the rich background experience group (Group I), and in the remainder of this thesis they will be referred to by their respective numbers.

I. THE RESULTS OF THE INTERVIEWS

Check-list for the interviews.[1] There was a definite purpose for asking certain types of questions. The first of these concerned the child's activities in which the parent would have an opportunity to reveal the fact if the child had shown great interest in reading (e.g., "What are his favorite playthings?" or "Has he ever asked you to teach him to read?").

A second type of question dealt with those other activities of the child which would tend to make reading experiences more meaningful (e.g., "Has he ever been on a picnic?").

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[1] Infra, Appendix A, p. 85.

Such questions as, "Is there any particular responsibility that the child has?" were asked to determine the child's dependence upon himself and the amount of responsibility he had assumed.

Questions were asked concerning the educational opportunities of the parents and the socio-economic status of the family now. Other questions concerned the status of the child in his own family group.

A fifth type of question dealt with the special training the child might have had before he entered the first grade. For example, "Does the child attend Sunday School?"

Parents' concerns for their children. Often parents are over-anxious to teach their children to read with disregard for their other needs. Twelve parents had tried to teach their children to read, but they were concerned also with other aspects of their children's development. This statement is based upon the comments made during the interview in response to the questions concerning what they would like for the teacher to know about the child when he entered first grade. The responses as to reasons for sending a child to nursery school or kindergarten were also considered noteworthy as an indication of the parent's aspirations for his child.

Some parents gave no indication of anything they

would like for the teacher to know concerning the child. These concerns of parents for their children dealt with (1) the child's physical development, (2) the child's mental development, and (3) his social-emotional adjustment. Table I classifies the concerns of the parents for their children.

TABLE I

A CLASSIFICATION OF THE CONCERNS OF THE PARENTS OF SELECTED FIRST-GRADE CHILDREN OF THE BOONE ELEMENTARY SCHOOL 1955-1956

	None	Physical development	Mental development	Social-emotional adjustment
Group I	4	7	4	10
Group II	4	8	0	10

Some parents indicated concerns that would be placed under more than one grouping. The total number of concerns for Group I is twenty-one, while the total for Group II is eighteen. There was little indication that the parents of Group I were more concerned as to the success of their children than were the parents of the children of Group II. There were two cases, one in Group I and the other in Group II, in which the investigator felt that the mother was unduly concerned. In both cases there was evidence of nervousness and uncertainty on the part of the child.

There was no way of evaluating the effort a parent

exerted, or his method of teaching, but six parents in each group indicated that they had tried to teach their children to read before they entered school. There is no evidence to show that these children benefitted from such effort on the part of the parents. Of the six children in each group whose parents had tried to teach them to read, there were four in Group I with reading achievement scores below the average for this group; there were three in Group II with scores below the average for the group.

The parents of the fifteen children in Group I who attended nursery school or kindergarten indicated they gave their children this opportunity in an effort to help them with social-emotional adjustment. Only one child in Group II attended nursery school, and this child was placed in nursery school so that he could have a place to stay while the mother worked.

Many interesting responses were given by the parents concerning what they would like for the child's teacher to know about him. Some of them are listed below.

"She's smart and spoiled rotten, still takes her bottle."

"He'd rather be in the house with me than to play outdoors."

"I want her to be good."

"She'll [the teacher] find out enough."

"Do they teach phonics at this school?"

"She has an almost uncontrollable temper."

"She is timid and shy."

"A little praise helps him a lot."

"If he gets his feelings hurt, he won't let on."

"I want him to behave."

Pre-school training experiences outside the home. The variety of pre-school training experiences the children had outside the home is apparent from Table II. In the light of the interview reports, it is evident that beginning reading instruction is not solely a school function. Conceding that there is wide variation in the programs offered through these outside-the-home pre-school training experiences, and that some children receive more good from them than do others, it is evident that most children benefit greatly from having had such experiences. The total number of outside-the-home pre-school training experiences for Group I is eighty-seven as compared to twenty-one for Group II. Only seven of the twenty children in Group II had the advantage of attending Sunday School; eighteen of the children in Group I had this privilege. One of the two children in Group I not attending Sunday School is of a religious faith that does not provide

Sunday Schools for its children.

TABLE II

PRE-SCHOOL TRAINING EXPERIENCES OF SELECTED FIRST-GRADE CHILDREN OF THE BOONE ELEMENTARY SCHOOL, 1955-1956

Experience	Total number of children	
	Group I	Group II
Attending pre-school summer sessions	17	2
Attending nursery school	15	1
Attending kindergarten	9	0
Attending Sunday School	18	7
Attending Vacation Church School	18	11
Taking dancing lessons	9	0
Taking music lessons	1	0
Total	87	21

Pre-school enrichment experiences found in the home. Table III reveals certain pre-school enrichment experiences found in the home of the two groups of children involved in this study. The question arises as to whether or not all of these experiences were advantageous to the child. Television is considered educational in many ways, but the opinion of this investigator is that creative activity is far more beneficial to a child than is mere entertainment. The value of

these experiences would be determined by their proper usage. It is interesting to note that only one child lives in a home where there is neither radio nor television. All of the children of Group I have television in their homes, and eleven of the twenty children in Group II also have this type of entertainment. Twelve children in Group II listen to the radio at home as compared with ten in Group I who do so, presumably indicating that, in general, children prefer television to the radio. According to the interviews, many of the children in Group I who do listen to the radio, listen to musical programs. The greatest numerical difference between these two groups of children, as related to the experiences under consideration at this time, lies in the number of children having record players and children's records. Children in Group I have eighteen record players in their homes as compared with only two in the homes of the children in Group II.

Only seven parents of pupils in Group II read to their children, while all of the Group I children have the experience of hearing their parents read to them. Only ten children in Group II have books of their own, while all of the children in Group I have them. Apparently certain parents with limited education place more value upon such forms of entertainment as radio and television than upon developing for their children pleasant associations with books.

TABLE III

PRE-SCHOOL ENRICHMENT EXPERIENCES OCCURRING IN THE HOMES OF SELECTED FIRST-GRADE CHILDREN OF THE BOONE ELEMENTARY SCHOOL, 1955-1956

Experience	Total number of children	
	Group I	Group II
Viewing television	20	11
Listening to radio	10	12
Using record player	18	2
Experience with children's books	20	10
Listening to stories read by parent	20	7

Pre-school enrichment experiences outside the home. In considering the pre-school enrichment experiences outside the home, twenty-one items were included. If a child is to apply what he reads to his own understanding, he needs many experiences in order to develop concepts.[2] If he has never been on a picnic, there will be little meaning for him in a story dealing with a picnic. On the other hand, if a child has had many pleasant experiences with his grandparents, he will be greatly interested in any story concerning grandparents. Table IV is arranged to show the total number of children from each group who had participated in each of the

[2] Supra, p. 4.

various activities. The total number of participations for Group I is 287 while that for Group II is 158. For those children in Group II who had traveled as far as one hundred miles from home, the purpose was, in most cases, to visit the grandparents. All of the children comprising Group I had been on vacations with the family, while only five children from Group II had had this experience.

Some of the meagerness of the pre-school experiences of Group II seems to be directly influenced by the low socio-economic status of the parents, but others are apparently due to lack of education on the part of the parents. From the standpoint of a meager background of experiences, Eloise is seemingly the most underprivileged. Her parents do not read. She has never had any books of her own, nor have there been magazines in the home. The family has no means of transportation, and, since they live far out even from any church or country store, the child had been away from home only once before she started to school. This one experience away from home was unhappy, for the child was seriously ill and was in the hospital for a period of one week. The family does have a radio. Eloise is seemingly the victim of both poverty and lack of education on the part of her parents. The home was clean, however, and the investigator feels that the mother is devoted to her child.

TABLE IV

PRE-SCHOOL ENRICHMENT EXPERIENCES, OCCURRING OUTSIDE THE HOME, OF SELECTED FIRST-GRADE CHILDREN OF THE BOONE ELEMENTARY SCHOOL, 1955-1956

Experience	Total number of children	
	Group I	Group II
Attending movies	20	16
Attending concerts	8	
Visiting seashore	16	1
Vacationing with family	20	5
Picnicking	20	18
Attending ball games	20	9
Fishing	12	10
Swimming	19	10
Shopping	20	17
Visiting dairy	8	5
Visiting farm	20	17
Visiting fire station	7	2
Visiting museum	7	
Visiting zoo	8	1
Attending circus	16	12
Traveling by train	6	1
Traveling by bus	10	2
Traveling by subway	1	
Traveling by airplane	1	
Riding in a boat	12	5
Riding in a truck	16	18
Traveling as much as 100 miles from home	20	9
Totals	287	158

Pre-school experiences in assuming responsibility. Teachers of first-grade children generally agree that these children are better fitted for school activity if they have been accustomed to assuming responsibility before they enter school. Table V reveals that the children of Group I assume more responsibility than do the children of Group II. The total number of responsibilities for Group I is forty-three as compared with thirty-one responsibilities for Group II. In Group I, eight of the fourteen children who have pets attend to their needs. In Group II, six of the thirteen children who have pets assume responsibility for their care. The interviews indicate that the parents of both groups often remind their children to attend to these duties. Nineteen children from Group I dress themselves, while only twelve from Group II do so. Sixteen children from Group I have accepted some particular responsibility in the home as compared with thirteen from Group II.

The answers to the question as to whether or not the child crossed the street by himself were not considered by the investigator to be a proper indication of independence in this respect, as there are many kinds of streets and roads throughout the community.

There is only one child who will not play outdoors without the presence of an adult and this child is found in Group II. Fourteen of the children in Group I spend the

night away from their parents while eleven of the children in Group II do this

TABLE V

PRE-SCHOOL EXPERIENCES IN ASSUMING RESPONSIBILITY OF SELECTED FIRST-GRADE CHILDREN OF THE BOONE ELEMENTARY SCHOOL, 1955-1956

Experience	Total number of children	
	Group I	Group II
Dressing himself	19	12
Feeding a pet	8	6
Assuming some particular responsibility	16	13
Totals	43	31

The child's place in his own home. The total number of children living in the homes of the children who comprise Group I is forty-nine, as compared to sixty-eight found in the homes of the children in Group II. Group I has three children who have no brothers or sisters, while Group II has two who fall in this class. The child having the largest number of brothers and sisters is in Group II; there are seven children in the family.

Assuming that a child learns from association with older brothers and sisters, it would seem that Group II has an advantage over Group I. Eleven children of Group I have

older brothers and/or sisters, while fifteen children of Group II have them.

Eight children, four from each group, do not have playmates. Again assuming that a child learns from older playmates, Group II has the advantage over Group I; eleven of the children in Group I play with older children, as compared with fifteen children in Group II who do this. Some children in both groups have both older and younger playmates. There is little difference between the two groups in this regard, as Group I has ten children who also play with younger children as compared with eleven in Group II who have younger playmates as well as older ones. There are seven children in Group I who have only younger children for playmates, while only three children of Group II have only younger children with whom to play, again giving the assumed advantage to Group II.

Pre-school responses that indicate a direct interest in reading. Table VI shows that there is a wide variation between the two groups of children in the number of direct pre-school responses which would indicate an interest in reading. The results of the interviews clearly indicate that there is a definite correlation between the things a child has done before he started to school and his desire to read. This motivation of Group I for reading may be a major

factor in success in beginning reading. Sixteen of the twenty children in Group I had indicated a desire for their parents to teach them to read before they had started to school, while only nine of the children in Group II had made this request. Nineteen of the children in Group I had asked questions about printed symbols, while only ten of the children comprising Group II had done this.

Four children of Group I preferred books as playthings, as compared with two children in Group II having this preference. One child in each group liked to play school. For each group, the same children who liked nursery rhymes liked for someone to read to them (i.e., all twenty of the children in Group I, and fifteen of the children in Group II).

The difference in the number of children in each group who could count above ten was less than was the variation for other responses. Fourteen children from Group I could count above ten, while eleven of the children in Group II could do this. (There was, however, no way of determining whether, in each case, the child was capable of meaningful counting or was merely "counting" by rote.) The variation increased a great deal in the recognition of ABC's, with Group I having eleven children who recognized them and Group II having only four children who did this.

Nineteen children from Group I recognized their own names, and all nineteen could write them. Fourteen children

TABLE VI

PRE-SCHOOL RESPONSES INDICATING A DIRECT INTEREST IN READING FOR SELECTED FIRST-GRADE CHILDREN OF THE BOONE ELEMENTARY SCHOOL, 1955-1956

Response	Total number of children	
	Group I	Group II
Preferred books as playthings	4	2
Liked to play school	1	1
Wanted someone to read to him	20	15
Liked nursery rhymes	20	15
Asked questions concerning printed symbols	19	10
Asked parent to teach him to read	16	9
Recognized own name	19	14
Wrote own name	19	11
Recognized ABC's	11	4
Counted above ten	14	11
Totals	143	92

from Group II recognized their own names with only eleven being able to write them.

Educational opportunities of the parents. The educational opportunities of the parents of these two groups of children are shown in Table VI. This table shows the number of grades of school completed by the mothers and by the fathers of both groups. It will be noted that for Group I the fathers are better educated, while the mothers fall into this classification for Group II. There is an average difference in the educational training of the mothers and fathers of Group I of .5 of one year. The average difference in the educational training of the fathers and mothers of Group II is .83 of one year.

The average educational training for the mothers of the children in Group I is two years of college, as compared with eight and one-fourth years of formal education for the mothers of the children in Group II. The greatest amount of formal education for the mothers of Group I is represented by attainment of the M. A. degree by two mothers in this group; the minimum amount of training for this same group is two years of high school. The greatest amount of educational training for the mothers of the children of Group II is represented by high school graduation on the part of two mothers; the minimum amount of educational

TABLE VII

EDUCATIONAL TRAINING OF PARENTS OF SELECTED FIRST-GRADE CHILDREN OF THE BOONE ELEMENTARY SCHOOL, 1955-1956

Grade Completed	Mothers		Fathers	
	Group I	Group II	Group I	Group II
Elementary				
1-3 years		2		1
4-8 years		11		11
High School				
1 year		3		1
2 years	1	1	1	1
3 years	1	1		
4 years	6	2	7	4
College				
1 year	1		1	1
2 years	2		1	
3 years	1		1	
4 years	6		3	
M. A. Degree	2		4	
Ph. D.			2	
Total number of years in school	279	165	292	141
Average number of years in school	College 2 years	Grade 8.25	College 2½ years	Grade 7.42

training for this same group is completion of three years of formal education.

The average educational training of the fathers of the children of Group I is two and one-half years of college, as compared to seven and four-tenths years in school for the fathers of the children of Group II. The greatest amount of training for the fathers of the children of Group I is represented by attainment of the doctor's degree by two fathers in this group; the lowest for this same group of fathers is seven and four-tenths years of schooling. The greatest amount of educational training for the fathers of the children of Group II is one year of college, while the lowest amount of training is three years of grade school.

The results of the interview show that the educational achievements of the parents are directly correlated with the opportunities they afford their children. It is interesting to note that there is considerable evidence in literature to indicate that there exists a marked relationship between socio-economic status of the family and the child's linguistic development.[3]

Occupational status of the parents. The occupational status of the parents of the two groups of children is shown

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[3] Supra, p. 15.

in Table VIII. There is a close relationship between the educational training of the parents and the kinds of work they do. The different kinds of work the parents of these children do has been classified as (1) Unemployed, (2) Unskilled Laborer, (3) Skilled Laborer, (4) Professional Worker.

Four of the mothers of the children of Group I work outside the home as compared with five of the mothers of the children of Group II who do this. (Two of this latter group work on the home farm.)

TABLE VIII

OCCUPATIONAL STATUS OF PARENTS OF SELECTED FIRST-GRADE CHILDREN OF THE BOONE ELEMENTARY SCHOOL, 1955-1956

Type of work	Mother		Father	
	Group I	Group II	Group I	Group II
Unemployed				1
Unskilled Laborer		3		9
Skilled Laborer		2	3	8
Professional Worker	4		17	1

II. THE TESTING PROGRAM AND ITS RESULTS

It is difficult to measure actual success in learning, and there are many problems connected with giving standardized tests to this age group. If a large group is tested at the same time, it is hard to be sure that all children are

giving their interest and attention. It is difficult for all to understand directions and repeated errors may be made.

Procedure of the testing. The children in each of the three first grade rooms used in this study were divided into two groups, thus placing the entire number of children to be tested in six groups so that better supervision might be given throughout the testing. Several children were tested individually because of the need of constant supervision. The testing program covered a period of approximately three weeks, making it possible for each group to have the advantage of the freshness of the morning hours. All of the testing, as well as the grading and compilation of scores, was done by the investigator of this study.

Determining success in learning to read. As to what is actual success in learning to read, Gates says the most important skills of all are: ability to think, reason, evaluate, relate, and organize ideas. He further states that these abilities come from the use of many experiences.[4]

The first-grade child is reading successfully when he recognizes words, gets the thought from the printed symbols, and relates what he reads to his own experience. It is to

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[4]Arthur I. Gates, "What Research Says About Teaching Reading," National Education Association Journal, 42:402-3, October, 1953.

be expected that there will be a large percentage of these basic sight words included in lists such as those compiled by Gates[5] or Thorndike.[6]

A child who is able to recognize words, such as names, signs, labels, and those found in experience charts, other than those on the word list would have a better word recognition ability than a child who recognizes only those found on the list. Word recognition in itself, however, does not guarantee success in reading. The child must learn to work with larger units. It is easy enough to test the number of words that a child can recognize from a given word list, but the greatest difficulty lies in appraising the child's understanding of these words and phrases, and of the application he makes of them to his own experience.

Teacher rating. The judgment of the teacher is not to be discounted even though it be subjective. According to Ross:

> One of the commonest criticisms of the validity of achievement tests, especially those of the objective type, whether standardized or nonstandardized, is that

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[5]Arthur I. Gates, A Reading Vocabulary for the Primary Grades (New York: Bureau of Publications, Teachers College, Columbia University, 1935), 29 pp.

[6]Edward L. Thorndike and Irving Lorge, The Teachers Wordbook of 30,000 Words (New York: Bureau of Publications, Teachers College, Columbia University, 1944), 377 pp.

> they are predominantly factual in character. It is alleged that they succeed in merely measuring verbal memory as distinguished from genuine understanding, and leave unmeasured the really important attitudes, appreciations, and ability to make intelligent application of knowledge to new situations.[7]

It seems reasonable to assume that the teacher is capable of appraising certain phases of reading progress that cannot be measured readily by means of the objective test, while the objective test will be more effective in other areas. A teacher-evaluation of what the child gets from his reading and of the amount of interest he has in reading has been included in this study.

It is conceded that each of the three teachers would use a different standard for the middle point, and that while one teacher might tend to rate her pupils high, another might tend to give lower ratings. Nevertheless, it is considered by the investigator as one valid means of getting comparisons between Group I and Group II.

Each teacher was given an alphabetized list of those pupils in her group that were included in the final study; she was asked to indicate the amount of interest usually shown by each individual child in reading.[8] After the above

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[7] C. C. Ross and Julian C. Stanley, Measurement in Today's Schools (New York: Prentice-Hall, Inc., 1954), p. 113.

[8] Infra, Appendix D, p. 89.

information had been collected, the teachers were given similar lists of their pupils and asked to indicate how much progress they believed each individual child had made in his reading. These teacher-evaluations were made before the reading achievement tests had been administered.

TABLE IX

TEACHER-RATING OF READING PROGRESS AND READING INTEREST SHOWN BY SELECTED FIRST-GRADE CHILDREN OF THE BOONE ELEMENTARY SCHOOL, 1955-1956

Reading Progress	Most	Much	Average	Little	Least
Number of children Group I	9	7	4		
Number of children Group II	1	2	5	5	7
Interest shown in reading	**Most**	**Much**	**Average**	**Little**	**Least**
Number of children Group I	10	5	5		
Number of children Group II	1	2	5	7	5

It is evident from Table IX that all children in Group I rate average or above on reading progress and on interest in reading. Twelve children in Group II rate below average on reading progress and on the amount of interest they have shown in it. Only three children in Group II rate above average on these two items. This variation between the

two groups of children in the amount of interest they have shown in reading seems to be one indication of the difference in stimulation of the varying backgrounds of pre-school experience. This may also indicate that motivation is an important factor in determining reading progress.

Standardized reading achievement test. The revised Gates Primary Reading Tests were used because they are well-known and have been used widely in other experimental work. They measure, according to the manual, the level and range of ability in word recognition, sentence reading, and paragraph reading.[9] As the tests on reading achievement were given when the children had been in school only five months, only the first two types (i.e., Word Recognition and Sentence Reading) were given, with a time limit of fifteen minutes each.

The Word Recognition Test consists of a four-page folder with a practice exercise of four items on the face, and forty-eight items arranged in two columns on each of the other three pages. Each item is made up of a picture and four words, one of which is the word corresponding to the picture. The directions to the children are first to look at the picture, then to look at the words next to the picture, then to find the one word that goes best with the picture and

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[9]Arthur I. Gates, Gates Primary Reading Tests, Grades 1 and First Half of Grade 2 (New York: Bureau of Publications, Teachers College, Columbia University, 1943).

make a ring around that one word. The score is the number of exercises marked correctly, minus one-third the number incorrect.

The Sentence Reading Test is also a four-page folder. The practice exercise consists of two items, and there are fifteen items, arranged five to a page, in the test proper. Each item consists of three sentences and six pictures. The first sentence in each item is followed by one vertical line; the second by two; and the third by three. The directions tell the child to read the sentence, find the picture that goes with the sentence, and mark it with the same number of lines as appear after the sentence.

The reading achievement scores of the two groups showed a difference of 0.6 years in reading age. The average reading age for Group I is 7.4 years as opposed to 6.8 years for Group II. The standard deviation of the reading scores for Group I is 6.38, while that of Group II is only 2.49. For Group I, the highest grade level reading score was 3.3 and the lowest for this same group was 1.5. The highest grade level reading score for Group II was 1.9, while the lowest for this same group was 1.3. In considering the variation in the reading achievement scores of these two groups of children, it will be noted that the greatest difference lies in the high scores of Groups I and II; it seems reasonable to assume that this difference resulted (at least in

TABLE X

DISTRIBUTION OF CHRONOLOGICAL AGES, MENTAL AGES, AND READING AGES FOR SELECTED FIRST-GRADE CHILDREN OF THE BOONE ELEMENTARY SCHOOL, 1955-1956

Months Grouped Scores	Chronological Age		Mental Age		Reading Age	
	Group No.		Group No.		Group No.	
	I	II	I	II	I	II
107-111		1*				
102-106			3	2	1	
97-101			6	1	2	
92-96	1	1	2	3	1	
87-91		3	6	4	7	
82-86	7	6	1	3	7	9
77-81	12	6	1	3	2	11
72-76		3	1	1		
67-71				3		
Mean	82	83.2	93.5	88.25	88.4	81.1
S. D.**	3.7	7.97	7.2	9.75	6.38	2.49

*If the one child, who is extremely over-age in Group II, is excluded, the standard deviation is only 5.43 for the chronological age. The average age for Group II is 81.7 months if the one extremely over-age child is not included. In consideration of this exclusion, the children of Group II are a little younger than the children of Group I.

**Standard Deviation

part) from interest and understandings developed through excellent pre-school experiences.

Table X gives the distribution of these reading scores as reflected in reading age (converted into months) for both groups.

Intelligence test. The revised Detroit Beginning First-Grade Intelligence Test[10] was used to determine the Mental Ages and I. Q.'s of the two groups. As to the validity of the test, according to the manual of directions, the correlation between weighted scores of this test and those of the Stanford-Binet, mental ages of 116 first-grade children was found to be .76.

The validity claimed by this test is a coefficient of .91 when corrected by the Spearman-Brown Formula. The correlation between successive administrations of the same form of the test, based on 407 cases with a four-month interval between testings was found to be .76, according to the manual of instructions.

The test consists of eight pages of pictures with practice items for each of the ten types of questions. The child circles one or more pictures, according to the oral

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[10]Anna M. Engel and Harry J. Baker, Detroit Beginning First-Grade Intelligence Test, Revised (Yonkers-on-Hudson, New York: World Book Company, 1937).

TABLE XI

DISTRIBUTION OF INTELLIGENCE QUOTIENTS FOR SELECTED FIRST-GRADE CHILDREN OF THE BOONE ELEMENTARY SCHOOL, 1955-1956

Scores	Group I	Group II
129-133	1	1
124-128	2	2
119-123	2	1
114-118	7	4
109-113	2	1
104-108	4	1
99-103		2
94-98	1	3
89-93	1	1
84-88		1
79-83		1
74-78		2
Mean	113.6	104
Standard Deviation	9.55	16.45

instructions given by the tester. The test is untimed.

Table X shows the distribution of these mental ages of the two contrasting groups of first-grade children used in this study. The average mental age for Group I is 93.5 months with a standard deviation of 7.2. The average mental age for Group II is 88.25 months with a standard deviation of 9.75.

Table XI gives the distribution of Intelligence Quotients for the two groups. The average I. Q. for Group I is 113.6, as compared with an average I. Q. of 104 for Group II. The six highest scores are evenly distributed between the two groups of children. The four lowest scores are found in Group II. In giving consideration to the variation in the scores of native ability of these two groups of children, it will be noted that the greatest difference lies in the low scores of Group II. The question arises as to whether or not a test of I. Q. can be separated from socio-economic background.

Table XII shows the correlation between the six highest I. Q.'s and the grade reading level; the six lowest I. Q. scores have been treated in the same manner.

In consideration of the assumption that a child's score on an intelligence test may not be disassociated from his socio-economic background, it seems that, for the children tested in this particular study, the native ability is

not the major determining factor in beginning success in learning to read. Those children with the lowest I. Q.'s were not as successful in learning to read as were others, but they were no less successful than were certain others with higher I. Q.'s. The one child numbered among the six lowest I. Q.'s who was successful in beginning to learn to read had an excellent background of pre-school experience.

TABLE XII

A COMPARISON BETWEEN THE SIX HIGHEST, AND THE SIX LOWEST, INTELLIGENCE QUOTIENT SCORES AND THE GRADE LEVEL READING SCORES FOR SELECTED FIRST-GRADE CHILDREN OF THE BOONE ELEMENTARY SCHOOL, 1955-1956

I. Q. Score	High I. Q. Scores		Low I. Q. Scores	
	Group I	Group II	Group I	Group II
	Grade reading level		Grade reading level	
129-133	2.6	1.8*		
124-128	1.9 1.7	1.9 1.6		
89-93			2.**	1.4
84-88				1.3
79-83				1.5
74-78				1.7 1.3

*This child had a very limited background of pre-school experience.

**This child had an excellent background of pre-school experience.

It is questionable as to whether or not the lowest I. Q. scores for Group II are low enough to prevent beginning success in learning to read if all other determining factors were favorable. It is evident that some children with high I. Q.'s have meager backgrounds of experience and that many children with rich opportunities for development have only average intelligence. It seems evident that some factor (or factors) other than intelligence play an important part in determining the success a child will have in beginning reading.

Physical factors. In testing the physical factors that might make a difference in the reading progress of the two groups of children used in this study, consideration was given to vision, hearing, size, and physical dexterity.

The Snellen eye chart was used, and the testing indicated that only one child was near-sighted enough to need glasses. This child was in Group I, and the child's vision was corrected to normal with glasses. As this test of vision discovers only those who are near-sighted, there is a possibility of error in stating that there was no difference between the two groups. Other scientific studies, however, indicate that vision is not a determining factor in success in learning to read.[11]

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[11] Supra, pp. 7-8.

An audiometer was used to test the hearing of all the children used in this study. One child in Group II had a slight hearing deficiency in one ear, while the other ear was below the average of the hearing of the other children, though not considered deficient. This child rated a grade level score of 1.7 on reading achievement. The I. Q. score of this same child was seventy-eight; therefore, it is assumed that her hearing difficulty has not caused inability to learn to read, as the reading accomplishment seems acceptable in the light of her I. Q. score.

As shown in Table XII, children in Group I are taller and heavier than those in Group II, indicating that Group I is better nourished than Group II. The average height of children in Group I is forty-eight inches, as compared with forty-six inches for those in Group II. There is a greater variation in weight of the two groups than there is in height. Group I children average forty-nine and ninety-five one-hundredths pounds, while Group II children average only forty-four and eighty-five one-hundredths pounds. After comparing heights and weights of the two groups, it was assumed that one child in Group I is underweight, while four children in Group II fall into this class. (The biological inheritance of these children was not studied; therefore, the apparent underweight of these children is assumed.)

These five presumably underweight children of Groups I and II have a correlation of reading achievement scores and I. Q.'s as follows: (1) I. Q., 124; Grade Level Reading Score, 1.6, (2) I. Q., 124; Grade Level Reading Score, 1.7, (3) I. Q., 96; Grade Level Reading Score, 1.6, (4) I. Q., 98; Grade Level Reading Score, 1.4, and (5) I. Q., 90; Grade Level Reading Score, 1.4.

There seems to be a positive relationship between good general health and beginning success in learning to read. As shown in Table XIII, there is wide variation in the number of recorded absences of the two groups, with Group I having an average of 4.65 absences per child, while Group II has an average of 13.4 absences per child. Not all absences in Group II, however, can be attributed to sickness. It is assumed that these parents do not realize the necessity of keeping their children in school as do the better-educated parents of the children of Group I. The five presumably underweight children have absences recorded as eight (Group I); twenty-four, twenty-four, twenty-nine, and twenty-one days (Group II). Thus, there are evidences of correlation between general health and school attendance.

The test of physical dexterity, or muscular co-ordination, consisted of pegs to be inserted in tiny holes within a given amount of time. This test, the results of which

TABLE XIII

EVALUATION OF CERTAIN PHYSICAL FACTORS OF SELECTED FIRST-GRADE CHILDREN OF THE BOONE ELEMENTARY SCHOOL, 1955-1956

Pupil No.	Group I			Group II		
	Height (ins.)	Weight (lbs.)	Days absent	Height (ins.)	Weight (lbs.)	Days absent
1	55	65	8	50	49	5
2	54	56	2	48	54	7
3	51	71	4	48	50	2
4	50	57	6	48	48	20
5	50	50	0	47	46	8
6	49	58	0	47	44	11
7	49	48	0	46	50	25
8	48	56	3	46	49	1
9	48	49	3	46	48	21
10	47	51	14	46	47	10
11	47	45	2	46	47	20
12	47	43	3	46	46	22
13	47	41	1	46	42	8
14	46	48	1	46	40*	24
15	46	45	4	46	38*	21
16	46	45	14	45	43	11
17	46	45	2	45	39*	24
18	46	43	3	44	41	3
19	45	44	15	43	41	4
20	45	39*	8	42	35*	29
Mean	41.8	49.95	4.65	46	44.85	13.4

*It is assumed that those children whose weights are marked with an asterisk (*) are underweight.

are found in Table XIV, tends to show that there was no appreciable difference between the two groups. According to the test results, there is little or no correlation between the low I. Q. and physical dexterity. The lowest I. Q.'s, according to the Detroit Beginning First-Grade Intelligence Test, were seventy-four, seventy-eight, and seventy-nine. These same children made scores of seventeen, twenty-two, and nineteen on the test of physical dexterity.

The second lowest score of physical dexterity (i.e., seventeen), was made by four children with I. Q.'s of 120, 116, 102, and 74.

The three children who made the highest scores on this particular test (i.e., twenty-four, twenty-four, and twenty-five) had I. Q.'s of 112, 130, and 133.

TABLE XIV

RESULTS OF PHYSICAL DEXTERITY TESTS ADMINISTERED TO SELECTED FIRST-GRADE CHILDREN OF THE BOONE ELEMENTARY SCHOOL, 1955-1956

No. pegs correctly placed	15	16	17	18	19	20	21	22	23	24	25	Total
Number of children Group I	2	0	2	2	1	6	3	1	1	2	0	395
Number of children Group II	1	0	2	5	2	4	4	1	0	0	1	388

The scores on the test of physical dexterity ranged from fifteen to twenty-five, with two of the lowest scores being made by children from Group I. The highest score was made by a child from Group II. The total score for Group I was 395, while that for Group II was 388, a difference which is not considered wide enough to be significant. No child tested seemed to be deficient to the extent of influencing his ability to handle the materials necessary for successful reading.

Social and emotional behavior. The social and emotional adjustment of the two groups was determined by ten days' observation of behavior, with the classroom teachers making the observations. Twenty-three items were included in the check-list,[12] with all behavior patterns except one (i.e., obscene talk) being observed.

Table XV also gives the results of this observed emotional and social behavior, showing the number of offenses by individual children in each group. This table shows the number of children who have the greatest difficulty with social adjustment, as indicated by a large variety of undesirable responses. Of the six children with five or more behavior disorders, five of them are found in Group II.

There are no instances of cheating found in Group II,

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[12] Infra, Appendix C, p. 88.

while Group I records two children who apparently felt it necessary to make a high score. Presumably, the parents of these two children expected more than the children are capable of doing. We also find more cases of imaginative lying in Group I, again presumably indicating that the children of this group feel the pressure of great expectations on the part of the parents.

The number of cases of tattling was much greater in Group I, presumably showing the talkativeness and aggressiveness of this group that had the advantage as far as preschool experience is concerned. Group I also had more offenses of quarreling, but none of fighting, probably indicating that their linguistic abilities are adequate to express their emotions. The children of Group II have probably been exposed to more of this latter type behavior; they also showed certain symptoms of maladjustment. There were no cases of stubbornness listed for Group I, while Group II had two cases.

As to the number of children who had no offenses listed against them, Group I had only six, while Group II had nine, presumably indicating that more children in Group II were withdrawn and timid.

Since reading difficulty may be caused by emotional maladjustment,[13] it seems reasonable to assume that some of

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[13] Supra, p. 10.

TABLE XV

CERTAIN BEHAVIOR TRAITS OF SELECTED FIRST-GRADE CHILDREN OF THE BOONE ELEMENTARY SCHOOL, 1955-1956, AS OBSERVED BY THE TEACHERS OF THESE CHILDREN

Behavior	Group I		Group II	
	No. cases	Frequency	No. cases	Frequency
Biting fingernails	1	1	1	1
Carelessness			2	5
Cheating	2	2		
Daydreaming	1	1	1	1
Envy	1	1	2	2
Expressed fears	1	2	1	1
Extreme nervousness	2	4	7	11
Fighting			4	13
Gossiping			1	1
Hostile to discipline	1	1	3	6
Hostile to peers			2	2
Imaginative lying	3	6	1	1
Laziness	1	1		
Moodiness			1	1
Obscene talk				
Over-secretiveness	1	2		
Over-talkativeness	5	9	1	10
Pushing	3	8	4	5
Quarreling	5	9	3	6
Shyness	3	5	4	4
Stubbornness			2	5
Tattling	8	16	4	8
Temper outbursts	2	2	3	3
Totals	40	70	47	86

TABLE XVI

UNDESIRABLE BEHAVIOR TRAITS OF SELECTED INDIVIDUAL FIRST-GRADE CHILDREN OF THE BOONE ELEMENTARY SCHOOL, 1955-1956

Number different instances	Group I		Group II	
	No. of children	Frequency	No. of children	Frequency
0	6		9	
1	4	4	4	4
2	3	10	1	2
3	4	24		
4	2	14	1	4
5			1	7
6			1	13
7			1	11
8				
9			1	23
10	1	18	1	22

the difficulty of Group II is partly due to emotional maladjustment.

Summary. In summarizing the results of the interviews as indications of pre-school experiences, it seems evident that the children of Group I have had the distinct advantage over those children who comprise Group II. Tables have been included giving the comparative results of these pre-school experiences.

Certain known variables, other than pre-school experiences, which could affect reading progress have been tested and the results recorded and analyzed.

The teacher-ratings of the children's reading progress and the interest they usually show in reading indicate that there are twelve children from Group II who rate below average, while all children of Group I rate average or higher, giving indication of stimulation by pre-school experiences.

The reading achievement test scores indicate superiority for Group I, which has an average reading age of 7.4 years, as compared to 6.8 years for Group II. There is a spread of scores among Group I from 3.3 to 1.5. The spread of scores for Group II is from 1.3 to 1.9.

The scores on the intelligence test show that there is little difference among the two groups at the top of the range of I. Q. scores. Group II, however, has a far wider

spread than Group I, and there are four scores of this latter group that range far below any of the scores of Group I. Thus it seems apparent that superior native ability does not insure success in beginning reading. Below average native ability could be a handicap in successful beginning reading.

The tests indicate that, in so far as the children involved in this study are concerned, the influence of subnormal vision, hearing, and muscular coordination on reading progress was negligible. There seems to be a distinct correlation between malnutrition, as indicated by assumed underweight, and lack of progress in learning to read.

There seem to be more maladjusted children in Group II than in Group I. It therefore seems reasonable to assume that social and emotional adjustment could be one of the determining factors in a child's success in learning to read.

The results of these tests justify the assumption that certain pre-school experiences constitute a major factor in determining the degree of success a child will have in beginning reading. There are, however, other determining factors whose influence on reading progress cannot be disregarded.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This study was carried out to determine the relationship between pre-school experiences and success in beginning reading. The children's background of experience was ascertained through the use of interviews with the parents. The children used in the final study were divided into two groups: (1) those who seemed to have had a rich background of experience and (2) those who seemed to have had a meager background of experience. Certain known factors (other than those dependent on experiential background) that could exert an influence upon the child's reading progress were evaluated through a series of tests administered by the investigator. Those variables were studied in relation to each of the two contrasting groups as a unit. An analysis of these data was made and tables showing the test scores of the variables were formulated.

I. FINDINGS

Findings of this study indicate that there is a positive relationship between pre-school experiences and success in learning to read. Apparently these experiences are important enough to be considered a major factor in determining

a child's success in beginning reading. There are, however, other factors that influence progress in beginning reading.

This study indicated that there is a close correlation between malnutrition and poor achievement in learning to read. Poor health and absenteeism are closely associated. The children comprising Group I are taller and heavier than are those of Group II, a strong indication of malnutrition among those children who comprise the meager background experience group. The reading achievement scores for those presumably underweight, undernourished children are among the lowest scores found; in the light of the I. Q.'s of these same children, it seems that the impeding factor of malnutrition may be stronger than that of meager pre-school experience background.

According to the test given, there was not enough difference in the eyesight of the two groups to be of any significance. The one child who had a deficiency of hearing (as tested by an audiometer) made an acceptable score on reading achievement in the light of his I. Q. score.

There seems to be no correlation between reading achievement and physical dexterity or muscular coordination. No child tested seemed inferior in muscular coordination. Neither was there any evidence of correlation between I. Q.'s and physical dexterity.

No attempt was made to test linguistic achievement, but a study of the educational training of the parents has

been made. There is positive evidence of correlation between the education of the parent and the opportunity he has given his child for contact with experiences (1) that would stimulate his interest in reading and (2) would broaden his concepts so that reading would be more meaningful.

There are indications that children in Group II are deficient in social and emotional adjustment as compared with those in Group I; this apparent lack of social and emotional adjustment on the part of the Group II children suggests that adjustment in these areas may be one of the major influences on success in beginning reading.

There is little correlation between I. Q. and success in learning to read. There is an indication, however, of correlation between lack of success and a lower than average I. Q. The children who had a rich background of experience show little advantage in I. Q. scores over those who had a meager background of experience. The six top scores are evenly divided between the two groups. The four lowest scores, however, are found in Group II. It seems questionable that the socio-economic status of the child influences the score.

His lack of success in learning to read will depend not upon one factor alone, but upon the strength or number of the impeding factors.[1]

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[1] Supra, p. 23.

II. CONCLUSIONS

This study has emphasized the importance of success in beginning reading as being of prime importance to the well-rounded development of the child. It is important that the six-year-old feel secure and that he attain some measure of success in his school work. The degree of success he will achieve in his school work depends to a large extent upon his success in reading, which is determined by more than one factor.

As no two children enter school with the same biological inheritance nor the same impact of environment, it is essential that each child be regarded as an individual. The first grade program should be one of varied activity that will enable each child to achieve success at his own level of ability.

As many of the first-grade children lack experiences that would tend to make reading a meaningful process, the program of the schoolroom should offer as many of these experiences as is possible. There is a limit as to what can be accomplished in one year's time. It seems reasonable to assume that a kindergarten program for five-year-olds would prove a valuable asset in improving the reading program of the schools.

The study indicates that the pre-school summer

sessions for first-grade children are of great value. It further indicates that first-grade children need the opportunity this experience affords.

As the children of Group II are capable of doing things with their hands as well as the children of Group I, a program of primary education that provides opportunities for training along lines other than those provided through the academic subjects would be beneficial to the children.

The reading problem of our schools is also a home problem.[2] Until parents realize the importance of the part they play in their children's success or failure in school work, teachers will be severely handicapped in teaching children to read regardless of the native ability they may possess.

The problem of malnutrition will require a change in the economy of the country and a program of education among the parents as to the proper use of whatever financial resources they have. The schools could profit by giving encouragement and close cooperation to those agencies that are working toward this end.

Since the parents need to be aware of the many things they can do to help prepare their children for the schoolroom, parent-training conferences seem to have a definite

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[2] Supra, p. 13.

place in the reading program for first-grade children. As many parents will be unable to attend these conferences, or will see no need for putting forth the necessary effort to attend, it is the opinion of this investigator that a visiting teacher could do much to bridge the gap between the children who comprise Groups I and II. It would probably be desirable to begin the home visits when the child is four years old. In homes where there is no reading material available, a system of loaning books might be arranged. The matter of absenteeism should be lessened through the efforts of the visiting teacher.

III. RECOMMENDATIONS

In the light of the data which have been presented in this and previous chapters, the investigator of this study makes the following recommendations:

1. School authorities and teachers should work cooperatively with welfare agencies and farm programs in an effort to alleviate the malnutrition that seems prevalent among many families.
2. The curriculum of our schools should be extended to include work experiences and vocational training for those students who are not succeeding in academic subjects.
3. A kindergarten should be established in connection

with the laboratory schools of Appalachian State Teachers College.

4. All beginning first-grade children should be encouraged to attend the pre-school summer sessions that are held in the Boone Elementary School.
5. Through the cooperation of the P. T. A., a program of parent-training conferences should be established.
6. A visiting teacher should be employed. She should visit in the homes of pre-school children and in the homes of those who are in the first grade. One of her major responsibilities should be that of educating the parents of these children with regard to their role in promoting the optimum development of their boys and girls, both prior to and following their entrance into the first grade. The visiting teacher should also be expected to encourage regular attendance on the part of all pupils, giving particular interest to those in the first grade.

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APPENDIXES

APPENDIX A

311 East King Street
Boone, North Carolina
September 1, 1955

Dear Parent:

As a student at Appalachian State Teachers College I am working on a project which I believe will benefit your child as a pupil in the first grade, your child's teacher, any person interested in this subject, and me. I am writing a thesis on PRESCHOOL EXPERIENCE AS RELATED TO LEARNING TO READ IN THE FIRST GRADE.

I would like to call upon you at the time most convenient for you. If you have a telephone number listed on your child's school record I shall call you for an appointment. If you would prefer to call me, my number is AM4-3687. I will not need more than thirty minutes of your time.

I am looking forward to working with the first grade children of the Appalachian Elementary School this winter. As an experienced teacher, nothing is quite so thrilling to me as to learn to know and understand these little children.

Sincerely yours,

Eunice Lowman
(Mrs. E. H. Lowman)

APPENDIX B

CHECK-LIST USED IN INTERVIEW WITH PARENT

1. Child's Name.....Birthdate.....
   Place of child's birth.....Address.....
   Community in which child lives (or road).....
   Telephone No.....
2. Child lives with: Both parents.....Mother.....
   Father.....Other.....
3. Number of children in family: Total..... Boys.....
   Girls..... Older..... Younger..... Away from home.....
   Others living in home.....
4. Father's name.....Occupation.....
   Education.....Church.....
   Place of birth.....Dead?..... When.....
5. Mother's name.....Occupation.....
   Education.....Church.....
   Place of birth.....Dead?..... When.....
6. What has been the child's association with grandparents?
   .....
7. To what clubs or organizations does the father belong?
   .....
   To what clubs or organizations does the mother belong?
   .....
8. Do the parents attend P. T. A.?.....
9. Has the child ever spent time away from home? What were the circumstances?.....
10. Does the mother work away from home?.....
    Where?.....Who keeps the child while the mother is at work?.....
11. Has the child been left with baby sitters?.....
12. (a) Nursery School?.....How long?.....Why?.....
    .....Did the child seem to enjoy this?.....
    (b) Kindergarten?.....Where?.....
    How long?.....Why?.....
    Do you feel kindergarten was helpful?.....
    Is there anything about kindergarten that was not helpful to your child?.....
    (c) Does the child attend Sunday School?.....
    (d) Has the child ever attended Vacation Church Schools?
    .....
13. Does the child ever spend time away from home visiting relatives or friends?.....With parents.....Alone....
14. Is your child anxious to start to school?.....
15. What are some of the things you would like for the teacher to know about your child?.....
16. Is his physical condition good?.....
17. Has he ever had any unfortunate experience?.....
18. Is he timid?.....

APPENDIX B (continued)

19. Does he like to be with other people?.....
20. What does he like to play?.....
21. Does he have playmates?.....
22. (a) What are his favorite playthings?.....
    (b) Does he like to play with books?....magazines?.....
    paper?.....pencil?....crayons?....clay?.....
    scissors?.....
23. How much has the child been on his own?.....
    (a) dress himself.....(b) errands.....(c) picking up...
    (d) play outdoors without an adult.....(e) cross street
    alone.....(f) other things of responsibility he does....
    .....
24. Did he ask many questions?.....Subject?.....
25. (a) Has he ever ridden: Bus.....Subway.....Automobile...
    ...Truck.....Train.....Airplane.....Boat.....
    (b) Has he ever traveled?.....Where?.....
    (c) Has he ever been on a picnic?.....
    (d) Has he been with the family on vacation?...Where?....
    (e) Has he been on trips to town?.....Shopping?.....
    (f) Has he been to a circus?.....Zoo.....Museum.....
    Farm.....Dairy.....Fire station.....Swimming.....
    Fishing.....Ball game.....
    (g) Has he been to the seashore?.....
26. Does the child have a pet?.....Does he care for it?....
    .....Do other members of family have pets?.....
27. (a) Has the child had special lessons: Music.....
    Dancing.....
    (b) Does he have a record player?.....Records?.....
    (c) Does he listen to the radio?.....Television?.....
    (d) Does he ever attend movies?.....Concerts?.....
28. (a) Does the child have any books of his own?.....
    (b) How many magazines come into the home?.....
    (c) Does the child like to look at magazines?.....
    Comics?.....
    (d) Does he like to be read to?.....
    (e) Have you had time to read to him?.....
    (f) Does he like nursery rhymes?.....
29. Does he ever ask questions about labels on cans, etc.?
    ..... Signs?.....
30. Did he ever ask you to teach him to read?.....
    Have you tried to teach him to read?.....
31. (a) Does he recognize his own name?.....
    (b) Can he write it?.....
32. Has he been taught to count?.....How far?.....
33. Does he know the ABC's?.....How did he learn them?....
    .....
34. General impressions:

CHECK-LIST FOR EVALUATION OF SOCIAL AND EMOTIONAL ADJUSTMENT

To the teacher:

Below are listed a number of factors which would indicate the social and emotional adjustment of a child. Please make your observations over a period of ten days. For each time a particular behavior is noticed, please indicate so that these numbers may be combined and a total given at the end of the observation period.

Name of child_____

Biting fingernails_____

Carelessness_____

Cheating_____

Daydreaming_____

Envy_____

Expressed fears_____

Extreme nervousness_____

Fighting_____

Gossiping_____

Hostile to discipline_____

Hostile to peers_____

Imaginative lying_____

Laziness_____

Moodiness_____

Obscene talk_____

Over-secretiveness_____

Over-talkativeness_____

Pushing_____

Quarreling_____

Shyness_____

Stubbornness_____

Tattling_____

Temper outbursts_____

APPENDIX D

To the Teacher:

As children vary greatly in the progress they make and in what they get out of their reading, it will be very helpful if you will indicate below which children in your group get the most out of their reading, those who get the least from their reading, and those who seem to fall between.

For each child listed below, please place a check mark in the column which most accurately fits what he seems to get out of reading.

Name	Most	Much	Average	Little	Least

To the Teacher:

As children vary greatly in the interest they show in reading, it will be very helpful if you will indicate which children in your group show the greatest amount of interest, those which show the least amount of interest, and those which seem to fall in between.

For each child listed below, please place a check mark in the column which seems to most accurately fit his usual interest in reading.

Name	Most	Much	Average	Little	Least